

ORIGINAL

NEW APPLICATION



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AZ CORP COMMISSION
DOCKET CONTROL

7 Attorneys for Arizona Public Service Company

9 **BEFORE THE ARIZONA CORPORATION COMMISSION**

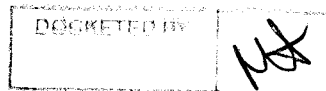
Arizona Corporation Commission

DOCKETED

APR 19 2016

11 COMMISSIONERS

12 DOUG LITTLE, Chairman
13 BOB STUMP
14 BOB BURNS
15 TOM FORESE
16 ANDY TOBIN



15 IN THE MATTER OF THE APPLICATION
16 OF ARIZONA PUBLIC SERVICE
17 COMPANY FOR APPROVAL OF
18 ELECTRIC SERVICE CONTRACT WITH
19 ALIGNED DATA CENTERS, LLC.

DOCKET NO. E-01345A-16-0131

**REQUEST TO APPROVE
EXPERIMENTAL HIGH LOAD
FACTOR PRICING STRUCTURE
CONTRACT**

20 On March 12, 2016, Arizona Public Service Company (APS or Company)
21 entered into an Electric Service Agreement (ESA) with Aligned Data Centers, LLC
22 (Aligned). Because the executed ESA contains Competitively Confidential Information,
23 the copy of the ESA attached as Exhibit A is a redacted copy. An un-redacted version of
24 the ESA will be provided to Arizona Corporation Commission (ACC or Commission)
25 Staff for their confidential review pursuant to an executed Protective Agreement.

26 Aligned is a technology company that operates pay for use, consumption based
27 data centers. Aligned operates a data center in Plano, Texas, and recently chose to
28 locate a data center in Phoenix. Aligned is currently constructing a data center in North

1 Phoenix that includes a microgrid project with APS. Aligned has commenced
2 construction of its Phoenix data center and anticipates that it will be in commercial
3 operation by late 2016.

4 Aligned anticipates being a very high load factor customer (above 90%). Such
5 customers provide operational and other economic benefits to the Company's
6 distribution system, as described below. This elevates the desirability to APS and its
7 customers of expanding that load.

8 Very high load factor customers help reduce the overall cost for APS to serve its
9 customers because they help flatten the overall system load profile, which, in turn,
10 allows APS to operate its generation fleet in a more optimal manner. This ESA employs
11 an experimental high load factor pricing structure that, once Aligned achieves a large
12 scale operation, will better align the price that Aligned will pay to APS to the costs that
13 APS incurs to serve it. Prior to reaching that scale, Aligned will be served on the
14 applicable E-32 or other general service rate.

15 The ESA also recognizes Aligned's interest in a greater renewable energy
16 resource commitment through provisions that allow it to purchase additional amounts of
17 renewable energy to enhance the overall resource profile that it receives from APS.

18 APS believes the Aligned ESA is justifiable as an important means of economic
19 development, consistent with the provisions the Commission approved in Decision No.
20 73183 that authorized APS to pursue economic development opportunities through the
21 use of Commission-approved contracts. (See Decision No. 73183 at Exhibit A,
22 Paragraph 17.4.) The ESA is also permitted under A.A.C. R14-2-1606 (C)(6) in that the
23 ESA does not prevent Aligned from accessing a competitive retail market if such market
24 should develop in Arizona during the term of the ESA.

25 APS requests the Commission approve the ESA.
26
27
28

1 RESPECTFULLY SUBMITTED this 19th day of April 2016.

2
3 By: Melissa M. Krueger
4 Melissa M. Krueger
5 Thomas L. Mumaw

6 Attorneys for Arizona Public Service Company

7 ORIGINAL and thirteen (13) copies
8 of the foregoing filed this 19th day of
9 April 2016, with:

10 Docket Control
11 ARIZONA CORPORATION COMMISSION
12 1200 West Washington Street
13 Phoenix, Arizona 85007

14 Britney Morgan
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EXHIBIT A



APS – ALIGNED ELECTRIC SUPPLY AGREEMENT

The parties to this EXPERIMENTAL HIGH LOAD FACTOR PRICING STRUCTURE Electric Supply Agreement ("ESA" or "Agreement") are ARIZONA PUBLIC SERVICE COMPANY, an Arizona corporation, hereinafter called "APS," and Aligned Data Centers (Phoenix), LLC, herein after called "Aligned" or "Customer." APS and Aligned are also referred to collectively as the "Parties." In consideration of the terms and conditions set forth herein and other good and valuable consideration, the Parties agree as follows:

1. PURCHASE AND SALE OF POWER

APS has determined that the Aligned facility listed herein should be offered an APS Experimental High Load Factor Pricing Structure, attached hereto. APS shall supply, and Aligned shall take, subject to the load modifications discussed in Section 17.1 and the terms of this ESA, all electric service required for operation of Aligned's data center located at 2500 W. Union Hills Road, Phoenix, Arizona 85027.

Electric service supplied under this Agreement shall be in the form of three-phase alternating current at approximately 60 hertz and approximately 12,470 volts.

2. APPLICABLE RATE AND ADJUSTMENTS

Data center start-up and commissioning ("Start-Up Period") is defined as the three (3) consecutive full monthly billing cycles of electrical service after Aligned has notified APS of its intent to begin start-up and testing, and will be served under the E-32L rate schedule. Notification of Start-Up Period must occur one (1) month before the beginning of the first billing cycle during start-up. Before and after the Start-Up Period, APS will provide service to Aligned under the appropriate general service rate for their load until [REDACTED]

[REDACTED]

[REDACTED]

3. MAXIMUM DEMAND

Maximum demand shall be [REDACTED] as measured for the simultaneous electric service demand and energy used by Aligned in any given 15 minute interval. Maximum Demand may be adjusted as provided in Section 16, "Contract Adjustment of Maximum Demand."

4. MINIMUM DEMAND

The minimum demand amounts will be [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

5. POINTS OF DELIVERY

The points of delivery are the precise locations where APS's service wires connect to the following Aligned equipment:



APS – ALIGNED ELECTRIC SUPPLY AGREEMENT

6. TRANSMISSION SERVICE OPTION

At Aligned's option during the term of this Agreement and any extension thereto, APS will allow Aligned to reimburse APS for [REDACTED] in order to qualify for transmission level service as specified in HLF-3.

7. METERING OF SERVICE

Measurement for all electric service supplied under this Agreement will [REDACTED] Customer's load at [REDACTED] shall not exceed the physical limitations set forth in Section 5 ("Points of Delivery") of this Agreement.

8. APPLICABLE SCHEDULES

As described in Section 2 above, Electric service will be supplied in accordance with E-32L for the Start-Up Period or on the otherwise appropriate standard general service rate until [REDACTED] and all generally applicable service schedules in effect during the term of this Agreement or as amended from time to time. Subject to Section 17.5 below, changes made to either HLF-3 or a service schedule shall automatically amend, and apply to, this Agreement to the same extent as though they had been originally incorporated as a part of this Agreement. HLF-3 is attached to and made a part of this Agreement.

9. RENEWABLE PREMIUM

9.1. APS's present energy mix is 44% carbon-free, comprised of approximately 27% nuclear and 17% renewable generation and energy efficiency. Aligned wants the option to purchase some or all of its energy from renewable resources to achieve a higher level of renewable energy mix.

9.2. [REDACTED]

9.3. [REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]



APS – ALIGNED ELECTRIC SUPPLY AGREEMENT

9.4.

[REDACTED]

9.5.

[REDACTED]

9.6.

[REDACTED]

10. SERVICE CURTAILMENT

Electric service may be interrupted or curtailed in accordance with APS's Service Schedule 5, "GUIDELINES FOR ELECTRIC CURTAILMENT," as filed with the ACC, which is subject to change as provided by law.

11. EFFECTIVE DATE AND TERM OF AGREEMENT

Subject to ACC approval, the term of this Agreement will [REDACTED]

12. REGULATORY APPROVALS

Pursuant to Arizona Administrative Code A.A.C. R-14-2-212.F.3., this Agreement is contingent on approval by the ACC. Either Party may terminate this Agreement, within thirty (30) days following ACC approval thereof, if the ACC modifies the Agreement or conditions its approval in a manner that is unacceptable to the terminating Party in its sole and absolute discretion.

13. TERMINATION

[REDACTED]

14. DISPUTE RESOLUTION

If either Party breaches the Agreement, the non-breaching Party will provide written notice of the breach. The breaching Party will have fifteen (15) days following the date of that notice to cure the breach. If the breach is not cured by the fifteenth (15th) day, the Parties will attempt to resolve the



APS – ALIGNED ELECTRIC SUPPLY AGREEMENT

breach through senior management negotiations. The senior management negotiations must conclude within thirty (30) days following the initial written notice of breach. If the Parties do not resolve the breach within this thirty (30)-day period, which period may be extended by mutual agreement, they may pursue any rights or remedies in law, equity or otherwise, but no act or omission taken pursuant to this Dispute Resolution provision shall be used as evidence of a breach or otherwise used against the allegedly breaching Party in any subsequent legal action.

15. DEPOSITS

In addition to any other rights that APS may have regarding the application of Aligned deposits, APS is entitled to apply any or all funds deposited with APS pursuant to this Agreement or any other agreement against any or all undisputed sums past due and owing to APS from Aligned, provided that any of these past due sums are owed for the same class of service as that provided under this Agreement.

16. CONTRACT ADJUSTMENT OF MAXIMUM DEMAND

In the event Aligned desires to raise the maximum demand level stated in Section 3, Aligned shall submit a written request to APS stating the requested revised maximum demand and the reason for the requested adjustment. APS shall respond within ninety (90) days following its receipt of such request and shall include a list of the conditions, if any, and schedule that must be satisfied in order to meet the increased demand requested. Such conditions may be supplemented by APS thereafter as necessary based on its continued review of Aligned's request.


- 16.1. If Aligned's requested revised maximum demand requires installation or modification to APS's existing facilities, as determined by APS, APS will determine Aligned's line extension cost for any necessary equipment installation or modification in accordance with APS's Service Schedule 3. Any and all associated costs shall be borne exclusively by Aligned unless otherwise agreed upon by APS.
- 16.2. If an adjustment to Aligned's maximum demand is approved, Aligned may not request another adjustment for a period of six (6) months following APS's approval of the prior adjustment.
- 16.3. Aligned acknowledges that upon execution of a revised Electric Supply Agreement for new maximum demand in accordance with this Section 16, APS is under no obligation to maintain or reserve system capacity beyond what is specified in the revised Agreement.
- 16.4. Aligned shall be liable to APS for any direct damage to APS's equipment, facilities or infrastructure (specifically including but not limited to the material and labor costs associated with repairing such damage and/or replacing equipment at new cost, not depreciated cost) that results if Aligned increases demand above the contractual maximum without APS's express prior authorization to do so.

17. GENERAL PROVISIONS

- 17.1. Nothing herein shall preclude Aligned from modifying its load as a result of installation of energy efficiency equipment, modification of operations to achieve energy efficiency, participation in demand response or similar programs, installation of on-site renewable primary generation or backup generation or energy storage facilities, or participation in net metering programs. In the event that Aligned takes any or all of the steps set forth in the preceding sentence, Aligned shall remain eligible for HLF-3 under this Agreement, provided that Aligned continues to meet the eligibility requirements under HLF-3.
- 17.2. If either Party successfully brings suit to compel performance under or for breach of this Agreement, that Party will be entitled to recover reasonable attorney's fees in addition to the amount of judgment and costs.
- 17.3. A waiver of any default of the other Party or any other matter arising in connection with this Agreement, at any time by either Party, may not be construed as a waiver of any subsequent default or matter.



APS – ALIGNED ELECTRIC SUPPLY AGREEMENT

- 17.4. THIS AGREEMENT, INCLUDING THE REFERENCED SCHEDULES, ANY OTHER REFERENCED OR ATTACHED DOCUMENTS, AND THE APPLICABLE RULES OF THE ARIZONA CORPORATION COMMISSION, STATES THE ENTIRE OBLIGATION OF APS AND ALIGNED IN CONNECTION WITH SALES AND DELIVERIES AS DESCRIBED HEREIN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, REPRESENTATIONS, OR WARRANTIES, EXPRESSED OR IMPLIED (INCLUDING WARRANTIES REGARDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), NOT SPECIFIED IN THIS AGREEMENT, THE REFERENCED SCHEDULES, ANY OTHER REFERENCED OR ATTACHED DOCUMENTS, OR IN THE APPLICABLE RULES OF THE ARIZONA CORPORATION COMMISSION CONCERNING DELIVERY OF ELECTRICITY BY APS TO, AND PURCHASE BY, ALIGNED.
- 17.5. The rates, terms and other contract provisions governing electric power sold to Aligned are subject to the jurisdiction of the ACC. Nothing contained herein may be construed as affecting or limiting in any way: (i) the ability of the ACC to make, or to require either directly or indirectly that APS make, any changes or impose any conditions on any such rates, terms or contract provisions, including but not limited to those contained in this Agreement; or (ii) the ability of APS to make unilateral filings for changes in or the imposition of conditions upon its general tariffed rate schedules, terms and conditions generally applicable or contract provisions generally applied in Electric Supply Agreements. APS agrees, however, that it will not unilaterally request through the ACC any change or imposition of conditions upon this Agreement or the HLF-3 rate in existence on the effective date of this Agreement (as described in Paragraph 11 above).
- 17.6. This Agreement will be interpreted in accordance with the substantive and procedural laws of the State of Arizona without regard to any conflicts of law provision contained therein.
- 17.7. 

18. ATTACHMENTS

The following additional documents are attached to and made part of this Agreement:

- APS's Service Schedule 1 – Terms and Conditions for Standard Offer and Direct Access Service
- APS's Service Schedule 3- Conditions Governing Extensions of Electric Distribution Lines and Services
- APS's Service Schedule 4 – Totalized Metering of Multiple Service Sections at a Single Site for Standard Offer and Direct Access Service
- APS's Service Schedule 5 – Guidelines for Electric Curtailment
- APS's Service Schedule 7 – Electric Meter Testing and Maintenance Plan
- APS's Service Schedule 8 – Bill Estimation
- APS's Service Schedule 15 – Conditions Governing the Providing of Specialized Metering
- APS's E32-L tariff, which shall apply prior to "Commercial Operation"
- APS's Experimental High Load Factor Pricing Structure – (HLF-3)



APS – ALIGNED ELECTRIC SUPPLY AGREEMENT

19. EXECUTION

This Agreement has been executed by the duly authorized representatives of the parties, as set forth below:

ARIZONA PUBLIC SERVICE COMPANY	Aligned Data Centers (Phoenix), LLC
Signature <i>Leland R. Snook</i>	Signature <i>Thomas Doherty</i>
Name Leland R. Snook	Name Thomas Doherty
Title Director, Rates & Rate Strategy	Title Chief Operating Officer
Date Signed 3/12/2016	Date Signed
	Mailing Address 60 Backus Avenue, Danbury CT 06810
	Permanent Phone # 301 351 3406
	Billing Address AlignedAP@avdbill.com 60 Backus Avenue, Danbury CT 06810
The individual executing this Agreement on behalf of APS represents and warrants: (i) that he or she is authorized to do so on behalf of APS; (ii) that he or she has full legal power and authority to bind APS in accordance with the terms herein and, if necessary, has obtained all required consents or delegations of such power and authority.	The individual executing this Agreement on behalf of Customer represents and warrants: (i) that he or she is authorized to do so on behalf of the Customer; (ii) that he or she has full legal power and authority to bind the Customer in accordance with the terms herein and, if necessary, has obtained all required consents or delegations of such power and authority.



**EXPERIMENTAL HIGH LOAD FACTOR
PRICING STRUCTURE HLF-3**

LOAD FACTOR REQUIREMENTS

Aigned must maintain a monthly load factor of [REDACTED] or more for each participating service account, for at least 9 out of the last 12 months. The monthly load factor is established by the following formula:

$$\text{Monthly Load Factor} = \text{Billed kWh} / (\text{Billed kW} * \text{Billing Days} * 24 \text{ hours})$$

RATES

The monthly bill will be computed with the following unbundled charges plus the adjustments identified below under "Adjustments". The bundled charges provide a summary of the unbundled charges for similar charge types (e.g. per day, per kW, per kWh). [REDACTED]

[REDACTED]. The charges for each service delivery level are:

Bundled Charges	<i>Secondary</i>	<i>Primary</i>	<i>Transmission</i>	
Basic Service Charges	[REDACTED]	[REDACTED]	[REDACTED]	\$ per day
Demand Charge	[REDACTED]	[REDACTED]	[REDACTED]	\$ per kW
Energy Charge	[REDACTED]	[REDACTED]	[REDACTED]	\$ per kWh

Unbundled Charges	(Included in Bundled Charges)			
Basic Service Charges				
Customer Accounts (\$ per day)	[REDACTED]	[REDACTED]	[REDACTED]	\$ per day
Metering	[REDACTED]	[REDACTED]	[REDACTED]	\$ per day
Meter Reading	[REDACTED]	[REDACTED]	[REDACTED]	\$ per day
Billing	[REDACTED]	[REDACTED]	[REDACTED]	\$ per day
Subtotal	[REDACTED]	[REDACTED]	[REDACTED]	\$ per day

Demand Charges				
Transmission	[REDACTED]	[REDACTED]	[REDACTED]	\$ per kW
Delivery	[REDACTED]	[REDACTED]	[REDACTED]	\$ per kW
Generation - Capacity	[REDACTED]	[REDACTED]	[REDACTED]	\$ per kW
Subtotal	[REDACTED]	[REDACTED]	[REDACTED]	\$ per kW

Energy Charges				
Generation	[REDACTED]	[REDACTED]	[REDACTED]	\$ per kWh
System Benefits	[REDACTED]	[REDACTED]	[REDACTED]	\$ per kWh
Subtotal	[REDACTED]	[REDACTED]	[REDACTED]	\$ per kWh



**EXPERIMENTAL HIGH LOAD FACTOR
PRICING STRUCTURE HLF-3**

Notes:

- a) The metering charges apply to typical installations. Customers requiring specialized equipment may incur additional metering charges that reflect the additional cost.
- b) Additional charges for some program options may be specified in a service agreement.
- c) "Direct Access" customers buy generation, transmission, and revenue cycle services from a third party supplier. Their APS bill will include the Delivery charge, the System Benefits charge and applicable Adjustments. If a revenue cycle service is not available from a third party supplier, it will be supplied by APS at the applicable rate.

ADJUSTMENTS

The bill will include the following adjustments:

1. The Renewable Energy Standard charge, Adjustment Schedule REAC-1 (see Arizona Corporation Commission Decision No. 70313).
2. The Power Supply Adjustment charges, Adjustment Schedule PSA-1 (see Arizona Corporation Commission Decision Nos. 67744, 69663, 71448 and 73183).
3. The Transmission Cost Adjustment charge, Adjustment Schedule TCA-1 (see Arizona Corporation Commission Decision No. 67744).
4. The Environmental Improvement Surcharge, Adjustment Schedule EIS (see Arizona Corporation Commission Decision No. 73183).
5. Direct Access customers returning to Standard Offer service may be subject to a Returning Customer Direct Access Charge, Adjustment Schedule RCDAC-1 (see Arizona Corporation Commission Decision No. 67744).
6. The Demand Side Management Adjustment charge, Adjustment Schedule DSMAC-1, (see Arizona Corporation Commission Decision Nos. 67744 and 71448).
7. The Four Corners Adjustment, Adjustment Schedule FCA, (see Arizona Corporation Commission Decision Nos. 74876 and 74948).
8. The applicable taxes and governmental fees which are assessed on APS's revenues, prices, sales volume, generation volume, or other business metrics.



**EXPERIMENTAL HIGH LOAD FACTOR
PRICING STRUCTURE HLF-3**

BILLING KW

The kW used for billing will be the greater of

1. The average kW supplied during the 15-minute period of maximum use during the month. A time period other than 15 minutes can be specified in a service agreement.
2. The minimum kW specified in a service agreement.

TYPE OF SERVICE

This schedule is not applicable to breakdown, standby, supplemental, residential or resale service.

The electrical service provided under this schedule will be three-phase, 60 Hertz, at APS's standard voltages that are available within the vicinity of the customer site.

POWER FACTOR

Requirements

1. The customer's load must not deviate from phase balance by more than 10%.
2. Customers receiving service at voltage levels below 69 kV must maintain a power factor of 90% lagging. And the power factor cannot be leading unless APS agrees.
3. Customers receiving service at voltage levels of 69 kV or above must maintain a power factor of $\pm 95\%$.

Monitoring

In situations where APS suspects that a customer's load has a non-conforming power factor, APS may, at its cost, upon reasonable advance notice, in a manner that is minimally disruptive to customer's operations, install certain monitoring equipment to monitor such loads.

Remedies

If the customer's load does not meet the power factor requirements they must fix the problem and pay the cost to install all monitoring equipment. Otherwise, they must pay for any costs incurred by APS for investments on its system necessary to address the issue. Also, until APS deems the problem to be remedied, APS may compute the customer's monthly billing demand with kVA instead of kW.

CONTRACT PERIOD

The contract period is that specified in that certain Electric Supply Agreement.



**EXPERIMENTAL HIGH LOAD FACTOR
PRICING STRUCTURE HLF-3**

TERMS AND CONDITIONS

Except as otherwise provided for in the relevant service agreement, the electric service will be supplied in accordance with this pricing structure, and except as otherwise provided herein, in accordance with all other generally applicable service schedules now in effect and as amended from time to time. A copy of this pricing structure shall be attached to and made a part of any service agreement to which it applies.